

PATENT ABSTRACTS OF JAPAN

(11) Publication number : 05-096136

(43) Date of publication of application : 20.04.1993

(51) Int.CI.

B01D 63/02
B01D 65/02

(21) Application number : 03-257954

(71) Applicant : TORAY IND INC

(22) Date of filing : 04.10.1991

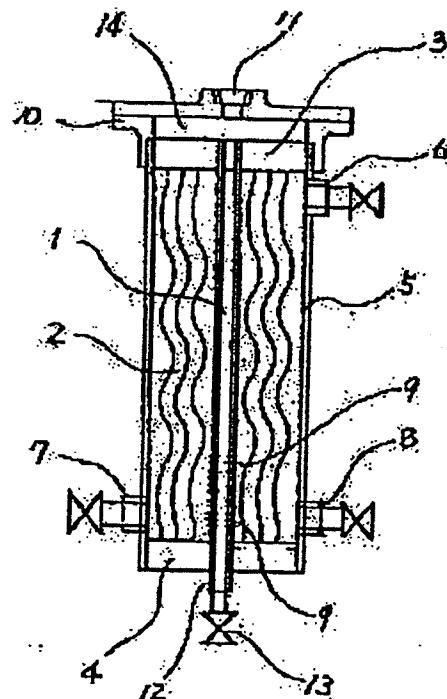
(72) Inventor : YAMAMURA HIROYUKI
NISHIMURA TETSUO

(54) HOLLOW-FIBER MEMBRANE MODULE AND USING METHOD THEREFOR

(57) Abstract:

PURPOSE: To obtain a hollow-fiber membrane module capable of continuously filtering liq. and capable of being periodically blown with air by positioning the tiny hole of the pipe of a hollow-fiber membrane module below the pipe center in the longitudinal direction of the module and close to the lower end plate of the module.

CONSTITUTION: A hollow-fiber membrane is arranged around a center pipe, the tiny hole of the center pipe from which air is discharged is positioned below the pipe center of the vertical hollow-fiber membrane module and close to the lower end plate. The water to be filtered is supplied from a nozzle 8, passed through the membrane, filtered and discharged from an outlet 11. Since the SS, bacteria, etc., are deposited on the membrane after the module is operated for a long time, air is bubbled from the tiny hole 9 to shake the membrane, and the deposit is removed. The membrane is uniformly shaken since the tiny hole is positioned at the lower part.



LEGAL STATUS

[Date of request for examination] 29.06.1993

[Date of sending the examiner's decision of] 29.08.1995